IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of	)
John Walsh	) Art Unit: 3635
Serial No. **10/797,572**	) Examiner: Jessica Laux
Filed: **March 11, 2004**	) Confirmation No. 4803
Title: **METHOD OF FORMING A MOLDED PLYWOOD DOOR SKIN, MOLDED PLYWOOD DOOR SKIN AND DOOR MANUFACTURED THEREWITH**	) Attorney Docket No: 16240.M293

Mail Stop: Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPELLANT'S REPLY BRIEF

Dear Sir:

In reply to the Examiner's Answer to the appeal of the above-identified application, Appellant respectfully requests that the Board of Patent Appeals and Interferences reverse the decision of the Examiner in whole, in light of the arguments herein, as well as those previously submitted in Appellant's Appeal Brief.

I. STATUS OF CLAIMS

Claims 1-14 and 27-33 are pending, stand rejected, and are being appealed. Claims 15-26 have been canceled.

II. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether the Examiner correctly applied the law of obviousness in concluding that claims 1-14 and 27-33 are unpatentable under 35 U.S.C. § 103(a) over Moyes, U.S. Patent No. 6,312,540 (hereinafter "Moyes") in view of Phillips, U.S. Patent No. 2,675,338 (hereinafter "Phillips").

III. ARGUMENT

Appellant maintains that each claim on appeal is separately patentable. Separate arguments for the patentability of each claim are set forth in Appellant's Appeal Brief. For the purposes of this Reply Brief, arguments are presented below with respect to multiple claims. These arguments are not meant to detract from or annul previous arguments made in the Appeal Brief as to the separate bases of patentability of each claim.

Appellant respectfully disagrees with a number of points raised by the Examiner in the Answer. The Examiner asserts that Moyes discloses the use of wood composites and that "one of ordinary skill in the art would have expected any of the various known types of engineered wood composite products to be suitable with the method of Moyes." *Examiner's Answer*, page 9. The Examiner is correct in pointing out that Moyes discloses using wood composites. The Examiner is incorrect, however, in assuming that the properties of all wood composites would be suitable for use with the method described in Moyes. One of ordinary skill in the art would not expect *any* type of wood composite material to work with Moyes, because one of ordinary skill in the art would understand the basic differences in properties between various materials. One of ordinary skill in the art would also understand that Moyes is not directed to all wood composite materials, but those that contain fibers *bound together with resin. See Moyes*, Column 5, lines 59-62.

Moyes deals with transforming a blank formed from wood fibers, particles, etc, all of which are discrete, small pieces of wood. Moyes does not disclose or suggest use of individual wood plies, such as are used to form plywood. Although the Examiner asserts that Phillips at Col. 1, lns. 30-44 (Answer pg. 9) discloses wood fibers, such disclosure is lacking. Indeed, Phillps refers solely to wood plies.

As discussed in section VII(A) of the Appeal Brief, the properties of plywood vary significantly from the properties of the materials used in Moyes. The differences are mainly due to the fact that plywood is made from thin sheets of solid wood, with the individual sheets being bound together, as opposed to individual fibers being bound together as in Moyes. When determining whether it would be obvious to use a material such as plywood with the process described by Moyes, one must look at what a person of ordinary skill in the art would take from Moyes as a whole. Instead, the Examiner has latched on to a few statements, ignoring the fact that Moyes continually discloses that the contemplated wood composite materials contain resin-bound wood fibers capable of relatively free flowing movement (*Moyes,* column 1, lines 6-12, 20-26, 41-44, 55-59, 66-67; column 2, lines 10-18, 32-35, 42-46, 60-62; column 4, lines 2-6, 34-40, 46-49; column 5, lines 17-20, 42-44, 59-65; column 8, lines 10-13, 40-42), and that the process is entirely unsuitable for use with solid plywood as discussed in detail in § VII(A)(2) of the Appeal Brief. The assignee of the present application is also the assignee of Moyes and thus is quite familiar with the differences between them.

The Examiner asserts that the plywood board in Phillips contains the same resins as those of the materials described in Moyes. This statement is a contortion of the facts. The resins discussed in Phillips are used to bind individual plies/sheets of wood together. Thus, they are only present between the individual panels. In contrast, the materials contemplated in Moyes consist of individual wood fibers, held together by resin and formed into panels. As one of ordinary skill in the art would understand, this creates a substantial difference in the properties of the material, and thus how the material would react to the molding process described by Moyes. The differences in the materials, and their reaction to the molding process, is discussed in greater detail in § VII of the Appeal Brief, and need not be discussed further here. By failing to consider

the difference between a resin binding separate sheets of solid wood, and a resin binding individual fibers to create a sheet of wood composite material, the Examiner has ignored what would be understood by one of ordinary skill in the art.

The Examiner has made a similar mistake in attempting to refute Appellant's argument that the use of melamine or formaldehyde would spoil the plywood. Again, the melamine and formaldehyde disclosed in Phillips are part of an adhesive used to unite the individual plies of wood. *Phillips*, Column 1, lines 30-42. Thus, the chemicals are used *between* layers of the wood. Moyes, however, discloses the use of these chemicals to condition the outer surface of the board, not interior layers. Indeed, in Moyes there are no individual interior layers. Appellant's argument was not that the use of such chemicals would simply spoil the plywood entirely, but that one of ordinary skill in the art would understand that the use of such chemicals as disclosed in Moyes would spoil the surface of the plywood, preventing it from being stained and otherwise adversely affecting the aesthetics of the finished product.

The Examiner maintains that Appellant's claims 4-8, directed to conditioning the board with water, are rejected as mere design choice. To support this rejection, the Examiner points to Appellant's specification which states that various methods of conditioning the board may be used. Appellant respectfully submits that using the specification of an application as the basis for supporting an obvious design choice rejection is impermissible hindsight. Besides, just because the specification states that a variety of methods may be used to condition the board does not mean that the use of any and all methods would be an obvious design choice; especially when none of the claimed conditioning methods are disclosed in the cited references. While Moyes discloses conditioning the board with water, the conditioning is accomplished by a roller. In no place do the cited references disclose conditioning the board with: steam in an atmospheric

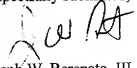
chamber; steam in a sealed pressurized chamber; or soaking in a water bath. Nor would it have been obvious from the disclosure of Moyes to utilize any of these methods.

Moreover, claims 6 and 8 recite specific time limitations for conditioning the board with water. These limitations represent the amount of time needed to provide optimal conditions of a board in their respective exemplary embodiments. Thus, these limitations provide a specific functional purpose and cannot be rejected as merely a design choice.

VIII. CONCLUSION

For the reasons given above, and those set forth in the Appeal Brief ,pending claims 1-14 and 27-33 are allowable and reversal of the Examiner's rejections are respectfully requested.

Respectfully submitted,



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